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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,401	07/31/2001	Shoshana Merchav	01/22310	1613

7590 10/01/2002

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EXAMINER

NAFF, DAVID M

ART UNIT PAPER NUMBER

1651

DATE MAILED: 10/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/890401

Applicant(s)

K9 Archer et al

Examiner

Haff

Group Art Unit

1651

--The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address--

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 7/31/01
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-99 is/are pending in the application.
- ☐ Of the above claim(s) is/are withdrawn from consideration.
- ☐ Claim(s) is/are allowed.
- ☐ Claim(s) is/are rejected.
- ☐ Claim(s) is/are objected to.
- ☒ Claim(s) 1-99 are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____
 - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

Claims in the application are 1-99.

Restriction to one of the following inventions is required under 35
U.S.C. 121:

I. Claims 1-20 and 51-70, drawn to a method of
5 expanding/maintaining undifferentiated hemopoietic stem cells
or progenitor cells by seeding the cells into a stationary
phase plug-flow bioreactor having a three dimensional stromal
cell culture pre-established on a substrate, and to a method of
transplanting the resultant cells in a recipient, classified in
10 class 424, subclass 93.7.

II. Claims 21-38 and 71-88, drawn to a method of
expanding/maintaining undifferentiated hemopoietic stem cells
or progenitor cells by culturing the cells in a medium
containing a stromal cell conditioned medium obtained from a
15 stationary phase plug-flow bioreactor having a three
dimensional stromal cell culture established on a substrate,
and to a method of transplanting the resultant cells in a
recipient, classified in class 435, subclass 395.

III. Claims 39-50, drawn to a method of preparing a stromal cell
20 conditioned medium by establishing on a substrate a three
dimensional stromal cell culture in a stationary phase plug-
flow bioreactor, and after a desired stromal cell density has
been achieved obtaining the medium from the bioreactor,
classified in class 435, subclass 325.

IV. Claims 89-99, drawn to a bioreactor plug, classified in class 435, subclass 289.1.

The inventions are distinct, each from the other because:

Each group involves a different inventive concept based on a different technical feature. Group I requires expanding/maintaining undifferentiated hemopoietic stem cells or progenitor cells in a bioreactor containing a pre-established stromal cell culture on a substrate, and this method is not required by Groups II, III and IV. Group II requires expanding/maintaining undifferentiated hemopoietic stem cells or progenitor cells by culturing the cells in a stromal cell conditioned medium, and this method is not required by Groups I, III and IV. Group III requires producing a stromal cell conditioned medium by a method that is not required by Groups I, II and IV. The bioreactor plug of Group IV can have a use other than for expanding/maintaining undifferentiated hemopoietic stem cells or progenitor cells as required by Groups I and II, or to produce a stromal cell conditioned medium as required by Group III. The bioreactor plug can be used in a bioreactor for culturing a microorganism to produce a product such as an enzyme, or can be used to immobilize an enzyme for reacting with a substrate to produce a product.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a
5 non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

10 Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Naff whose telephone number is (703) 308-0520. The examiner can normally be reached on Monday-Thursday and every other Friday from about 8:30 AM to about 6:00 PM.

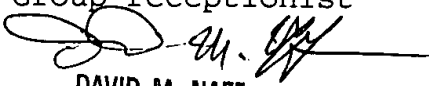
15 If attempts to reach the examiner by telephone are unsuccessful, a message can be left on voice mail.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn, can be reached at telephone number (703) 308-4743.

20 The fax phone number is (703) 872-9306 before final rejection or (703) 872-9307 after final rejection.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

25 DMN
9/27/02


DAVID M. NAFF
PRIMARY EXAMINER
ART UNIT 1651